

REMARKS/ARGUMENTS

Applicants note with appreciation the Examiner's allowance of the present application.

The present Amendment modifies Claim 22 to clarify that the subject matter of this claim relates only to a partial Fourier Transform being performed using Goertzel's algorithm. To that end, the alternative language "and/or reduced" has been deleted. Deletion of this alternative language in fact narrows Claim 22 and is consistent with Claims 8 and 9 and the recital in the last line of original Claim 22, which recited in the last line that "the partial Fourier transform is performed using Goertzel's algorithm," a recitation also found in Claim 9. Claim 9 depends from Claim 8 which specifies that the Claim 1 "separate Fourier Transform is a partial Fourier Transform." Thus, the present amendment will simply make Claim 22 correspond to the recital in Claims 8 and 9 that the separate Fourier Transform is "a partial Fourier Transform" "performed using Goertzel's algorithm." This Claim 22 amendment will also return the subject matter claimed to original form because Claim 22 originally depended from Claim 21 that required the Fourier Transform to be a "partial Fourier Transform."

Accordingly, Claims 8-9 support the amendment to Claim 22 to remove the "and/or reduced" language there from and demonstrate that no new search is required. The definition of a "partial" Fourier Transform at page 2, lines 20-22 of the specification taken with the description of processing using Goertzel's algorithm appearing at page 6, line 20-page 7, line 11, for example, also provides clear support for the change.

Thus, it is believed to be clear that entry of the amendment to Claim 22 involves only a formal matter and that such entry should, accordingly, be permitted as it is clear that this amendment requires no further search or other consideration on the merits. Accordingly, Applicants respectfully request that this Amendment under 37 CFR §1.312 be entered.

The present Amendment also seeks to clarify Applicants' remarks submitted with the Amendment filed August 29, 2005. These remarks presented the fact that Claim 1 requires the use of a separate, partial and/or reduced Fourier Transform to derive phase values for at least two points of a sampled signal. It is now further pointed out that these points are more commonly referred to as "frequency bins." Note the discussion at page 2, lines 20-25, of the specification, for example. While the prior remarks noted that sampling frequency offset was compensated in dependence on a difference in phase variations at respective points, Applicants also note that Claim 1 further recites another distinguishing feature that each phase variation represents the difference between the phase value derived for that point and further phase data.

In this regard, it is clear that Rinne performs compensation for phase error using both time domain compensation and frequency domain compensation. Further, the frequency domain compensation being taught seems to be governed by formulae 5 and 7. However, this Rinne frequency domain compensation does not involve any difference between phase variations for different frequency bins.

In addition, it is submitted that the time domain compensation taught by Rinne seems to be governed by formulae 4 and 9 to 17. This time domain compensation uses phase errors calculated for the two preceding symbols, but does not use the difference between phase

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variations for different bins of a symbol. Accordingly, Claim 1 is submitted to clearly distinguish over Rinne.

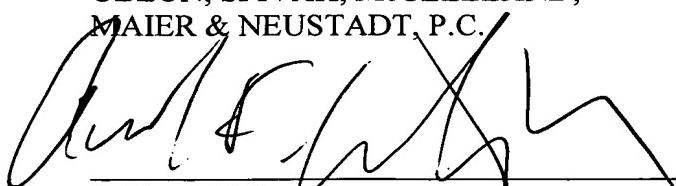
While Applicants' prior remarks further noted the claimed compensation for local oscillator frequency offset, it is further noted that Rinne does not explicitly mention any compensation for local oscillator frequency offset.

In regard to Claim 22, the stated feature of the use of a partial Fourier Transform, derived using Goertzel's algorithm to derive a phase for at least one point of the sampled signal is nowhere suggested in Rinne. It is further noted that Rinne contains no suggestion for deriving a phase variation representing the difference between a phase value for this at least one point and a further phase value, and then compensating for local oscillator frequency offset in dependence on that phase variation.

In light of the above comments, entry of this amendment under 37 C.F.R. §1.312 is believed to be in order and is respectfully requested.

Respectfully submitted,

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